FORAGE FOR THE FARMER.

An Address by C. C. Moore, Before Dixle Farmers, Club, Mecklenburg County, N. C , May 13, 1904.

The president of your farmers' club has assigned to me the subject, "Forage for the Farmer." In my opinion, he has named the most important, yet the most neglected, source of profit on the average Southern farm.

Here and there on our Southern farms will be found a large barn for storage of forage; there, however, are few. The average barn is so small that even if the farmer were so disposed he could not shelter provender sufficient for winter feeding of his few head of stock. How many one- and two-horse farmers can you now recall who had rough food in abundance the past winter for all their stock?

Farmers who provide plenty of rough forage have walking advertisers telling the fact to all persons who pass or go onto his farm; his stock tell the tale. He may be short of corn and oats, but if the barn loft is full, his horses and cattle are full, and do not feel the need of a full crib or granary.

A farmer buys corn only when he is forced to do so, and feeds bought corn miserably. He will not buy forage for his horses hardly when forced to do it, and of all miserly feeders you ever saw, the hay buyer takes the lead. So it seems to me that the first consideration with laying plans for crops to be produced, the most important is to provide for forage, and give this crop precedence over the money crop, let that be cotton, tobacco or grain.

Forage in abundance is the back-bone of good farming, and no farmer is living up to his rights and privileges if he is dependent on some other farmer for his roughness. Can you show me a farmer who can afford to buy hay? Look at the prices-best hay, \$22; mixed, \$20; prairie, \$16; pea, \$20; oat straw, \$12; wheat straw, \$8; shredded stover, \$8; cottonseed hulls, \$9. To buy feed at these prices will bankrupt any farmer. Raise and sell all you cannot feed. I think the price of cottonseed hulls is a great blessing. I will be glad to hear that next season the price will be \$20 per ton. I anticipate an advance over the present prices, and if \$20 is the mark, the advantage to our farmers cannot be estimated. What hulls is fed in our county has no effect on the price, the demand elsewhere regulates the price; so if every farmer and dairyman abandons hulls as a feed, the mills will not feel the loss.

And that is just what we should do. Let the mills pay the cotton farmer \$40 per ton for seed, then sell the hulls for a big price away from home; you get the money.

Far too many farmers have depended on cottonseed hulls for rough feed for their cattle, and by so doing their farms are poorer to-day than would be if all the cattle forage had been grown on their own land. Let us resolve to cut out hulls hereafter and feed our home-grown forage.

What will a farmer raise as a forage crop? This I will not answer, but can tell you what I think are the cheapest and best crops to raise.

I head the list with corn, the great king of the grass family. Do you want forage, lots of it, and good quality? Well, just take one acre of your best cotton land, prepare exactly as you do for cotton planting, using just as much guano and manure, plant just as thick as your cottonseed are planted, give the same cultivation that you would to cotton. The yield will astonish you, and if crop is cut when lowest blades begin to brown, and all is put in good shocks to cure, there will be a food which all stock will eat up clean.

Just try this and report results at your club meeting in May, 1905. I have used the corn crop in many ways as a forage, have fed stalks long, cut them dry, shredded and made silage of them. Any way I found to be good feed, but the handiest plan is to put entire crop into silo.

Were I on a farm where I had to winter one horse and ten cattle, I would build a silo and put my corn in it, cutting one-half to one inch long. I would also have an acre or so of thickly planted corn to feed dry and long—then, if I could raise and cure pea hay sufficient to feed each animal ten pounds daily, it would not bother me if oil mills sold hulls at \$50 and meal at \$100 per ton, and the price of hay would only concern me when I had it to sell.

The cowpea is at home with us; we can grow as much per acre as can be grown anywhere, and we all know if we have plenty of this protein feed we do not care if corn is \$1 per bushel; we do not need corn with pea hay. Every man here knows how to get pea hay, so I will not advise.

Soja beans, millet, sorghum, and other summer crops yield immense crops. All are good forage plants and are easy to cure.

Even the press of work on a cotton farm should not prevent the production of ample forage for all stock and plenty to sell also.

The cotton farmer can make his forage crops grow through the winter months, the seeding and cultivating will not interfere with the summer attention to cotton or tobacco. He may sow winter oats in August, and make hay of the crop when in the "dough" state. This, with me, is a very important forage crop; the time and labor devoted to winter oats pays a big per cent.

Crimson clover sown alone, or with rye, wheat or oats, will produce one to two tons of hay per acre. As a hay crop, I like crimson and wheat best, sowing in September, or not after the 15th of October. This combination can be cured into a soft, green hay which is liked by all stock.

Wheat and oats sown together is another combination for hay; the yield on fairly good land is immense.

Rye hay is not as good as above crops, but as it is a sure crop, I always sow a rye and make into hay.

What can be raised on fifty acres? This depends upon the man and the land. If the right man and twenty-five cows are on the fifty acres, the crops will be enormous and the money returns big. The right man will raise on:

Six acres, corn for ensilage, at least ninety tons.

Eight acres (corn to mature) corn, four hundred bushels.

Ten acres, winter oats to thrash, four hundred bushels; stover, ten tons; straw, seven tons.

Six acres, oats for hay, fifteen tons.

Three acres, rye for spring feeding to May 15. Four acres, wheat, for spring feeding to June 15. Two acres, millet (green) for feeding to July 10. One acre, turnips, eight hundred bushels.

Ten acres, the winter oat lot sown to cowpea will give of hay twelve tons.

Three acres of rye land planted to sorghum will give green feed to November 1.

Six acres of oat hay land planted closely in corn will make fifteen tons of stover.

So the fifty acres will yield in tons one hundred and seventy, in bushels one thousand six hundred, in summer green feed eight months, and yet have ten acres left for a permanent pasture. The products of the fifty acres if fed to twenty-five cows will produce a huge pile of manure to be returned to the land, and year after year cows may be added until this land will support one cow to each acre.

Should the owner make butter, his account would be as follows:

Receipts.

7,500	pounds butter sold at 17 cents	\$1,275.00
15	calves, sold at \$3	45.00
	shoats fed on skim milk and corn	
500	will make 3,000 lbs. pork at 8c	

Total	*****************	1,620.0
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	Wages to two good helpers	\$500.00
ì	Five tons wheat bran	120.00
ш	Five tons cottonseed meal	
	Total	750.00
	Gain	870.00

If the farmer's family can do all the work, as is often the case, \$500 may be added thus—

\$500.00 \$1,370.00

Which is a pretty fair sum of money, but this will be larger each year as the land becomes more productive and a larger herd is kept.

If products of the cows is sold as fresh milk, the income would be:

Receipts.—Twenty-five cows yield 7,500 quarts of milk at 2½ cents, \$1,875.

Expense,—Same as producing butter, \$370. Grain, \$1,505.

The cost of care for thirty to thirty-five cows is but little more than twenty-five; so if the herd has thirty-five cows the gain would be near \$2,000 per year.

Think over these statements and figure—doing so may change the plans of some man and be the means of enlarging his income and enabling him to give his family more comfort and enjoyment than they supposed was their lot in life.

Growing Tulip Bulbs Profitably in Eastern Carolina. Editors Progressive Farmer:

The following may not be uninteresting to your readers in the Eastern section of the State. Last fall the United States Department sent me for trial here a lot of tulin bulbs of the early varieties, such as are used in immense quantities by the florists for winter forcing and then thrown away. The bulbs sent were grown in the State of Washington, and they were anxious to know what the difference in climate would show.

The result has been very flattering to us here. I have lifted the crop and find that the large bulbs are fully as fine as those from Washington, and the increase in offsets is little short of marvelous. In fact, from one hundred and fifty bulbs sent, I now have six hundred and fifty of all sizes. Some of my own produtcion were planted alongside the Washington bulbs and their increase is fully as great. Now what does this mean to those who are engaged in the growing of bulbs in Eastern North Carolina? These early tulips command at least as much at wholesale as tube-roses, and twice as many can be grown on an acre. They can be planted in the fall when the tube-roses are lifted and in the spring the tube-roses can be set between the rows if the tulips are not ripe in time to be lifted and the tulips lifted later, and thus (with very liberal manuring of course) the land can be doubled in production. I believe that tulips can be profitably added to the commercial produtcion of bulbs in this State, and wish to thus call attention to them. W. F. MASSEY,

Horticulturist and Botanist, North Carolina Experiment Station.

The observing poultry raiser will observe that the long bodied breeds are the egg-producing breeds as a rule. Take, for instance, the Leghorn fowl and the Buff Cochin. Anyone who has any experience with the two breeds will concede the former to possess double the laying capacity of the latter, at least that has been my experience in handling the two breeds. My Cochins were three-fourths pure-bred and their beauty of form and feathers was their only recommendation, except as served as a roast; in that capacity they were above censure. Broodiness, aggressiveness and stupidity were marked characteristics of the Cochins of my stock.—Mrs. A. C. McPherson, Athens Co., Ohio.